

Date: Wed, 11 Aug 93 04:30:19 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V93 #6
To: Ham-Digital

Ham-Digital Digest Wed, 11 Aug 93 Volume 93 : Issue 6

Today's Topics:

FWD: DSP filters and desired features
INTERNET PACKET GATEWAY
Meteori scatter and Troposcatter

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 10 Aug 93 17:41:28 MDT
From: agate!dog.ee.lbl.gov!hellgate.utah.edu!cc.usu.edu!slp9m@ames.arpa
Subject: FWD: DSP filters and desired features
To: ham-digital@ucsd.edu

Dear DXer and Contester Users and Potential Users of DSP filters,

(If someone could post this on any other appropriate reflectors
(other than CQ-CONTEST reflector), I would appreciate it.)

I have had a JPS NIR-10 filter since the product first came out. I have
not yet upgraded to the latest firmware, but feel that its best feature
is the automatic removal of multiple carriers. At Dayton this year I
purchased a Timewave Technology DSP-59. I was very impressed with its
automatic removal of carriers as well as its noise reduction and LP/HP
filter capability, and of its intuitive control operation, especially
the "aggressiveness of the correlation function" adjustment.

I have also been one of the beta sites for the Digital Interactive
DSP-120 filters. Comparing it to the others is a classic apples and

oranges comparison. The DSP-120 has digital record and playback on the host computer (which it requires for many of its functions and the other filters do not use a host computer), as well as a graphics screen display on your computer for filter selection and changing, and a time domain and frequency domain display. Because of the DSP-120s wide range of features and computer interface it is somewhat more difficult to master than the other two which have only knobs and switches (especially in a contest on Sunday at 4 a.m. local or anytime when the QSO rate is high). But the DSP-120 lacks the capability of automatic reduction of multiple carriers that I find quite useful on phone. (In fact my normal operation involves leaving any DSP engine in the automatic removal mode for all general operating.) (When the Timewave Technology DSP-59 is switched to carrier removal mode and it is used on CW, its operation is so fast that only the leading edges of the dots and dashes get through -- very impressive.) (The Digital Interactive DSP-120 has an adaptive filter function that when turned on integrates the spectral components over whatever time you let it run and designs a matched filter that corresponds to the individual's voice to which it was listening -- impressive indeed.)

The designer of the DSP-120 is not an amateur radio operator (the filter has a number of non-ham applications) and relies on feedback from users for adding and prioritizing new features. I feel that the automatic removal of carriers is an important feature, maybe even a fundamental feature, and that the lack of this capability reduces the usefulness (and marketability) of the DSP-120.

So, I am requesting any input from both users of DSP filters as well as potential users regarding usefulness of various functions on the currently available filters, as well as a "wish list" for features to be included in the next generation of DSP filters. Especially interested in "correlation function" types of filtering, where highly correlated signals (such as carriers) are rejected, low correlation signals (such as noise) are rejected, and moderately correlated signals (such as voice) are passed through.

Reply to me directly or via the reflector as appropriate (per Trey's guidelines). I am at broz@csn.org

Thanks for the input! John Brosnahan W0UN

--

forwarded to USENET by...

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Date: 11 Aug 93 00:52:12 GMT
From: usc!howland.reston.ans.net!agate!msuinfo!netnews.upenn.edu!feith1!kd3bj!
chris@network.ucsd.edu
Subject: INTERNET PACKET GATEWAY
To: ham-digital@ucsd.edu

M16616@mwvm.mitre.org writes:

>Is there an INTERNET PACKET gateway on the East Coast USA similar to N0ARY? .
>
>
My system will _soon_ be set up, but isn't quite there yet.
--
73 de KD3BJ (Chris Nadovich, chris@flam.com)

Date: 10 Aug 93 18:03:18 GMT
From: headwall.Stanford.EDU!Csli!paulf@RUTGERS.EDU
Subject: Meteor scatter and Troposcatter
To: ham-digital@ucsd.edu

tjonz@caliban.Corp.Sun.COM (Todd Jonz) writes:

>It sounds like Dean is looking for a reliable path, and Glenn recommends
>meteor scatter, which surprised me. I had the impression that meteor scatter
>was a very occasional thing, like when the Persids or Leonids were in town.
>Is this not the case? If I were to work nothing other than meteor scatter,
>how many hours would I be able to work during an "average" week?

Well, now that all depends on a number of factors. If you rely on shower
meteors (known in the MBC world as "overdense"), then you're correct, the
time between pings is quite long. Most MBC systems, however, rely on
underdense meteors, which are the result of collisions with cosmic dust, and
which are far more frequent (10^{14} per day). The exact equations are in
the CCIR Green Books.

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-=Paul Flaherty, N9FZX | "The National Anthem has become The Whine."
->paulf@Stanford.EDU | -- Charles Sykes, _A Nation of Victims_

End of Ham-Digital Digest V93 #6
